## FACT SHEET - INTERNAL ONLY

Environmental Stewardship Initiatives for PF225 Fence Construction along the Southwest Border U.S. Border Patrol Tucson Sector August 2010

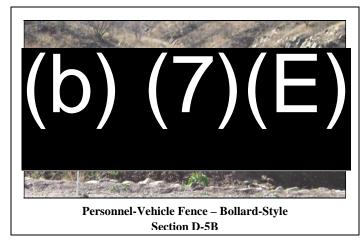


The following is a summary of the environmental stewardship initiatives undertaken by U.S. Customs and Border Protection (CBP) during the planning, construction, and post-construction stages associated with installing tactical infrastructure (TI) along the U.S./Mexico International Border in the U.S. Border Patrol (USBP) Tucson Sector for TI sections "D-5B," "D-6," and "E-2A." TI is a term used by the USBP to describe the physical structures that facilitate enforcement activities. These items typically include, but are not limited to, roads, vehicle and pedestrian fences, lights, gates, and boat ramps. TI constructed under CBP's Secure Border Initiative (SBI) Pedestrian Fence 225 (PF225) Program within the Tucson Sector consisted of pedestrian and vehicle fence, gates, and patrol/maintenance roads along the U.S./Mexico International Border in Santa Cruz and Cochise counties, Arizona. Temporary construction staging areas and access roads were also required to build the TI. This Fact Sheet provides the environmental impacts anticipated during pre-construction planning and those actually encountered during and following construction. In addition, it describes stakeholder outreach efforts that were carried out during all phases of the project, contributing partners, and any continuing issues.

On April 1, 2008, the Secretary of the U.S. Department of Homeland Security (DHS), pursuant to Section 102(c) of the Illegal Immigration Reform and Immigrant Responsibility Act (IIRIRA) of 1996, as amended, exercised the waiver authority and waived certain environmental and other laws in order to ensure the expeditious construction of TI along the U.S./Mexico International Border. The TI described in this Fact Sheet is covered by the Secretary's April 1, 2008, waiver. Although the Secretary's waiver means that CBP no longer has any specific legal obligations under the laws that are included in the waiver, the Secretary has committed DHS to responsible environmental stewardship of our valuable natural and cultural resources. CBP strongly supports the Secretary's commitment to responsible environmental stewardship. To that end, CBP prepared a pre-construction Environmental Stewardship Plan (ESP), which analyzed the potential environmental impacts associated with construction of TI. Following construction, CBP prepared an Environmental Stewardship Summary Report (ESSR), which compared the final completed action to the original planned for installation of TI.

The following is a summary of CBP's environmental stewardship efforts.

- CBP carried out environmental stewardship efforts before, during, and after construction.
- Environmental impacts that resulted from this project were both positive and negative.
- Best Management Practices (BMPs) were developed and carried out to minimize negative environmental impacts.
- Stakeholder public outreach was conducted during all phases of the project. Some of the stakeholder input resulted in changes to the project.



CBP participated in interagency and intergovernmental coordination activities to help minimize potential
environmental impacts and streamline environmental processes. Some of the input also resulted in changes to
the project, such as the locations of construction access roads and the actual fence design.

After construction within these sections of the USBP Tucson Sector, the following were determined:

 No significant issues associated with cultural resources occurred. One previously unknown cultural resources site was unexpectedly discovered during construction activities proximate to a construction access road for Section D-6. Immediately following this discovery, construction activities were halted at this location and the construction access road was rerouted to avoid the resource.

- Approximately 117.6 acres of land were disturbed from the installation of TI in these sections.
- No changes to the size of wetlands were recorded and there were no permanent adverse impacts. Less than 2 acres of wetland areas were identified prior to construction within the project footprint, and these areas were monitored during construction to ensure that adverse impacts did not occur.
- Three federally listed animal species and two federally listed plant species were adversely impacted from
  construction. There were no impacts to critical habitats of federally listed animal or plant species. The actual
  impacts to federally listed species and the lack of impacts to critical habitats of federally listed species were
  considerably lower than what was anticipated prior to construction.

# **ENVIRONMENTAL STEWARDSHIP COMPONENTS**

CBP carried out environmental stewardship initiatives during all phases of the project, before, during, and after construction. Each component is discussed in the following paragraphs.

## **PRE-CONSTRUCTION**

**Environmental Stewardship Plan** – In 2008, prior to construction, CBP developed two ESPs for these PF225 sections in the USBP Tucson Sector.

- July 2008 Final Environmental Stewardship Plan for Construction, Operation, and Maintenance of Tactical Infrastructure U.S. Border Patrol Tucson Sector, Naco Station, Arizona (E-2A).
- August 2008 Final Environmental Stewardship Plan for the Construction, Operation, and Maintenance of Tactical Infrastructure U.S. Border Patrol Tucson Sector, Nogales Station, Arizona (D-5B and D-6).

These two ESPs discuss the unique biological, geographical, and environmental conditions associated with the areas proposed for TI and include BMPs designed to reduce and offset potential environmental impacts. The ESPs remain available to the public and are online at http://cbp.gov/xp/cgov/border security/ti/ti docs/.

**Biological Resources Field Surveys and Plans** – CBP carried out preconstruction surveys to identify existing vegetation and wildlife within

the area of the proposed fence corridor, patrol/maintenance roads, and construction staging areas and access roads. Subsequently, two BRPs were developed in coordination with the U.S. Fish and Wildlife Service to summarize findings and incorporate them into the ESPs.

- July 2008 Biological Resources Plan for Construction, Operation, and Maintenance of Tactical Infrastructure for U.S. Border Patrol Tucson Sector, Arizona, Section E-2A.
- August 2008 Biological Resources Plan for Construction, Operation, and Maintenance of Tactical Infrastructure for Tucson Sector, Arizona, Nogales Station (D-5B and D-6).

Special attention was paid to identifying federally listed species and critical habitats of federally listed species within the project area.

**Estimated Footprint** – It was estimated prior to construction that approximately 200.5 acres of land would be disturbed from the installation of TI in these sections of in the USBP Tucson Sector.

Examples of potential environmental impacts and the BMPs and mitigation measures used to minimize these impacts are listed in **Table 1**. Not all anticipated environmental impacts were adverse; in fact, some were positive. CBP predicted that the installation of TI would reduce the amount of smuggling and illegal immigration, which would have a beneficial effect on national security and socioeconomics. The reduction in illegal cross-border activity would reduce foot traffic in sensitive habits and would benefit threatened and endangered species and their habitats.

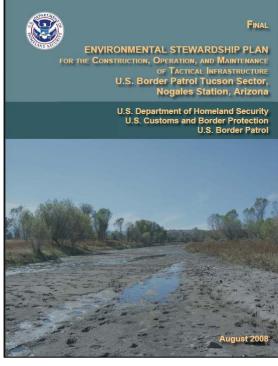


Table 1. Potential Environmental Impacts and BMPs/Mitigation Measures Identified Prior to Construction

Potential Environmental Impact (Cultural, Species, Wetlands)	BMPs and Mitigation Measures to Reduce or Eliminate the Potential Environmental Impact			
Discovery of cultural resources in work area	Halt construction until authorized to proceed by a qualified archaeologist who will consult with appropriate resource agencies			
	<ul> <li>Place temporary fencing around International Boundary Monuments and other known cultural resources</li> </ul>			
Discovery of federally protected species in work area	Halt construction until an environmental monitor can safely remove the protected species or it moves away on its own			
Wildlife impacts due to	Survey the area for migratory bird nests immediately prior to construction			
construction	Check open holes each morning to ensure that wildlife have not fallen in and become trapped			
	Integrate wildlife escape ramps into open trenches and excavations			
	Cap vertical bollards to prevent birds from falling inside			
	<ul> <li>Minimize the removal of agave plants, which provide forage base for federally protected species</li> </ul>			
	Relocate outside of the project areas agave plants that need to be removed			
Introduction of invasive	Wash equipment prior to use to minimize introduction of nonnative species			
species	Remove only the minimum amount of vegetation			
	Remove invasive species that appear			
Change in size of wetlands and	Use silt fencing and hay bale placement to prevent erosion and soil movement			
surface waters	Halt construction during heavy rains			
	Establish and follow a Storm Water Pollution Prevention Plan			

## **DURING CONSTRUCTION**

CBP contracted independent environmental monitors (i.e., for biological and cultural resources) to be present during all construction activities. The monitors' responsibilities included documenting adherence to the BMPs prescribed in the ESPs, identifying environmental impacts that occurred beyond those predicted in the ESPs, and ensuring that federally listed species and cultural resources were not impacted by the TI construction activities. CBP's environmental monitors worked during all construction activities, which occurred from July to December 2008.



Fence Construction at Section D-5B

The environmental monitors reported that most BMPs prescribed in the ESPs were followed; see **Table 1** for examples of BMPs. However, some deviations did occasionally occur, including the following:

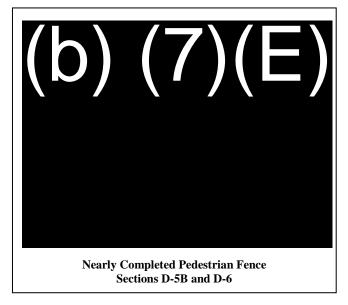
- Lack of flagging around work areas
- Unnecessary off-road driving
- Unnecessary widening of some existing roadbeds
- Improperly managed trash
- Open trenches without proper small animal escape ramps
- Lack of drip pans underneath equipment
- Lack of sufficient erosion control.

No significant impacts on environmental resources resulting from the BMP infractions were reported.

Unexpected field conditions during construction occasionally required practical changes to the plan for placement and design of the TI. One such occurrence took place at Section D-6, where a proposed construction access road needed to be rerouted to avoid a cultural resource finding, which was unexpectedly discovered during construction activities. In these situations, CBP conducted additional environmental surveys and analyses to determine the potential environmental impacts and the appropriate BMPs needed to support the changes. Most changes to the design and placement of the TI were minor and included slight refinements of fence type and footprint to meet operational requirements.

#### **POST-CONSTRUCTION**

**Environmental Stewardship Summary Report** – CBP conducted post-construction field surveys of biological and cultural resources and prepared an ESSR.



 May 2010 – Environmental Stewardship Summary Report of the Construction, Operation, and Maintenance of Tactical Infrastructure Pedestrian Fence Segments D-5B, D-6, and E-2A U.S. Border Patrol Tucson Sector, Arizona.

The ESSR provided the following information:

- Identification of the final locations of TI and acreages of areas impacted
- An environmental baseline for future TI maintenance and repair efforts
- Documentation of the overall adherence and successes of the BMPs implemented during construction
- A record of the differences between the final locations and types of TI and those that were identified in the ESPs.

CBP's post-construction field surveys found that 117.6 acres of land were disturbed from the installation of TI in these sections. **Table 2** summarizes the estimated pre-construction and actual post-construction ground disturbance totals.

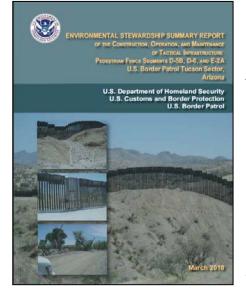


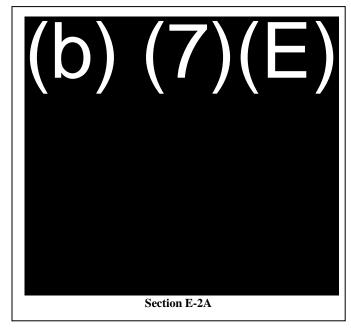
Table 2. Estimated Pre-Construction and Actual Post-Construction Ground Disturbance

Construction Activity	Estimated Disturbance in Acres (linear miles)	Actual Disturbance in Acres (linear miles)	Difference in Acres (linear miles)
Fence and	166	88.6	-77.4
Patrol/Maintenance Roads	(13.8)	(13.9)	(+0.1)
Construction Access Roads	6.5	13.2	+6.7
Construction Staging Areas	28	15.8	-12.2
Total Impacts	200.5	117.6	-82.9

The overall reduction in disturbed area from that anticipated is attributed to a reduction in the width of the fence and patrol/maintenance road corridor and the sizes of the construction staging areas. Approximately 47 percent of the area proposed for the fence and patrol/maintenance road corridor and 44 percent of the area proposed for construction staging areas were not needed, and therefore, were not disturbed. The construction access roads did, however, require more land than that anticipated during pre-construction planning. This increase in size resulted largely from the construction of an unplanned construction access road and minor deviations to the alignment of the construction access roads that were planned prior to construction. One such alignment deviation resulted from a construction access road being rerouted to avoid a cultural resources finding.

Additionally, CBP's post-construction field surveys concluded the following:

- No significant issues associated with cultural resources occurred. One previously unknown cultural resources site was unexpectedly discovered during construction activities proximate to a construction access road for Section D-6. Immediately following this discovery, construction activities were halted at this location and the construction access road was rerouted to avoid the discovery.
- Approximately 117.6 acres of land were disturbed from the installation of TI in these sections.
- No changes to the size of wetlands were recorded and there were no permanent adverse impacts. Less than 2 acres of wetland areas were identified prior to construction within the project footprint, and these areas were monitored during construction to ensure that adverse impacts did not occur.



There were three federally listed animal species and two federally listed plant species that were adversely
impacted from construction. There were no impacts to critical habitats of federally listed animal and plant
species. Table 3 shows that the actual impacts were considerably lower than what was anticipated prior to
construction.

Table 3. Estimated Pre-Construction and Post-Construction Impacts on Federally Listed Species

	Animals		Plants	
Method for Species Counts	Species	Critical Habitat	Species	Critical Habitat
Federally listed species and suitable habitat identified in the Biological Resources Plans	19	2	4	1
Federally listed species observed during pre-construction surveys <sup>a</sup> or construction monitoring <sup>b</sup> within the project corridor	0	1	1	0
Federally listed species and suitable habitat impacted by construction	3	0	2	0

Notes:

### STAKEHOLDER OUTREACH ACTIVITIES

Throughout all phases of this project, CBP reached out to stakeholder organizations and regulatory agencies to incorporate their input as potential environmental impacts were identified, evaluated, and mitigated, as necessary. Outreach efforts included the following:

- **Open House** The general public was invited to receive information and provide comments at open house events on January 31, 2008, in Tucson, Arizona, and on May 13, 2008, in Sierra Vista, Arizona.
- Incorporation of Comments CBP solicited comments from the following:
  - Federal, state, and municipal government agencies
  - o Non-government organizations

- Stakeholder organizations
- Native American tribes
- o Private individuals.

For these TI sections, approximately 20 comments were received, considered, and incorporated into the ESPs by CBP.

Based on the proposed project corridor

<sup>&</sup>lt;sup>b</sup> Based on surveys and monitoring of revised project areas

- Government Agency Coordination CBP directly coordinated with government agencies including the following:
  - U.S. Section, International Boundary and Water Commission
  - U.S. Department of Agriculture, which includes the following:
    - U.S. Forest Service
    - Coronado National Forest
  - o U.S. Army Corps of Engineers

- U.S. Department of the Interior, which includes the following:
  - U.S. Fish and Wildlife Service
  - U.S. Bureau of Land Management
  - U.S. Bureau of Indian Affairs
  - U.S. Bureau of Reclamation
- o Arizona State Land Department

The information received from the outreach efforts resulted in numerous changes to the project, including the location of construction access roads, placement of construction staging areas, and design of fence components to minimize potential environmental impacts.

## **CONTRIBUTING PF225 PROGRAM PARTNERS**

To accomplish the 2006 Congressional mandate for the DHS/CBP to construct approximately 700 miles of border fence along the U.S./Mexico International Border by the end of December 2008, the DHS enlisted the assistance and expertise of interagency departments and other governmental agencies to provide management and subject matter experts for environmental stewardship, construction, real estate acquisition, and contracting tasks. Contributing partners include the following:

- Office of Border Patrol
  - Tucson Sector

- U.S. Army Corps of Engineers
  - o Fort Worth District
  - Los Angeles District

### **CONTINUING ISSUES**

CBP's post-construction surveys identified one continuing issue that needs to be addressed in the future. At Sections D-5B and D-6, large areas of exposed soils and occasional areas of soil erosion were noted along the fence and patrol/maintenance road corridors and the construction access roads. Additional land contouring, revegetation efforts, or the installation of permanent soil erosion-control devices might be required to prevent future soil erosion issues.

CBP remains committed to environmental stewardship and will continue to monitor the TI sections for potential additional actions.

